



Expanding the Role of the Four-Year Institution FOR SEAMLESS SUCCESS IN CAREER PATHWAYS

As career pathways blur the lines between college and career readiness, learners are provided a variety of on- and off-ramps toward the career of their choosing. To ensure that learners are best prepared for opportunities at all levels, both state and local administrators seek to turn “college **or** career readiness” into “college **and** career readiness” and are further discussing how a four-year institution can be an integrated stop on a longer career pathway, instead of a siloed and separate path for learners. Whether through transfer and articulation, through grants that bring disconnected learners back to higher education or through short-term credentialing and applied bachelor’s degrees, four-year institutions remain integral to career pathways systems beyond the traditional degree pathway. They also have a clear role in supporting all learners, including those who matriculate at a different point than right after high school graduation, by breaking down the college-career silos and creating seamless transitions for learners who desire to continue their educational journey.



To support the expansion and acceleration of high-quality and equitable career pathways, JPMorgan Chase launched the [New Skills ready network](#), a national initiative consisting of six sites, each composed of state, regional and local partners. The initiative draws on cross-sector partnerships to facilitate systems work, including through the creation of seamless transitions between secondary institutions and two- and four-year postsecondary institutions to ensure that learners of all levels have access to the opportunities that are right for them.



As the college/career dichotomy further blurs, states and local institutions are developing innovative solutions to facilitate smooth transitions within extended career pathways, ensuring that learners have seamless access to high-quality opportunities. Because of overlaps in public and private postsecondary systems, the transition point between community or technical colleges and four-year institutions requires special attention to policy and practice. While strong examples of transfer models, direct articulation, seamless credit transfer, dual admission and other initiatives exist to enhance the connection between college and career success, so too do logistical and bureaucratic barriers limit the opportunity for success.

Four-year degrees that integrate academic and technical skill, while preparing learners for future careers, are often inaccessible and cost-prohibitive for learners. And while seamless transfer between a community or technical college and a four-year institution remains a cost-effective way to ensure that learners have the technical and advanced academic skills to be successful in a career field,¹ transfer and articulation often remains focused on

general education requirements. Credits are often transferred as block credit, and are not often aligned to support broad career pathways and workforce development initiatives.² National transfer data reveals that bachelor's degree attainment for transfer learners is often difficult to achieve and inequitable, which demonstrates the significant work still to do in this area.³

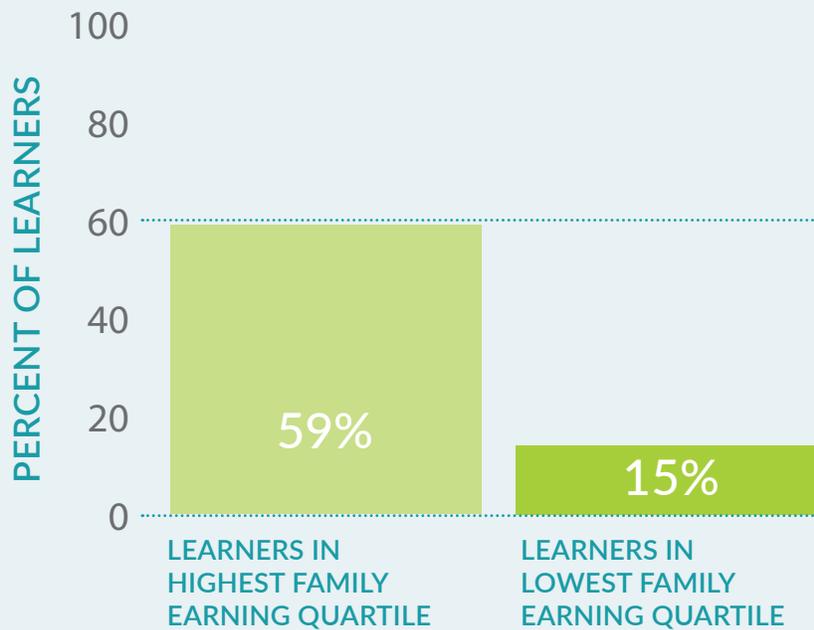
This brief seeks to highlight both the challenges facing postsecondary administrators and the strategies used at both the state and local levels to overcome those challenges and ensure that learners can seamlessly transition between and across institutions. It also provides recommendations for further expanding four-year institutions into a future home for learners to successfully achieve their career goals while still recognizing the value of a bachelor's degree.

The Importance of Postsecondary Partnership

Despite the host of opportunities available, the diminishing faith in the value of bachelor's degrees, particularly among young people,⁴ contrasts with the often-overlooked value of associate degrees and short-term credentials,⁵ causing confusion for learners about the best pathway to achieve their career success. Research evidence only further

demonstrates the challenges that state policymakers and local postsecondary institutions face to ensure equitable postsecondary success for learners: 59 percent of learners in the highest family earning quartile achieve a bachelor's degree by age 24, but only 15 percent of learners in the lowest quartile do.⁶

BACHELOR'S DEGREE ATTAINMENT BY AGE 24



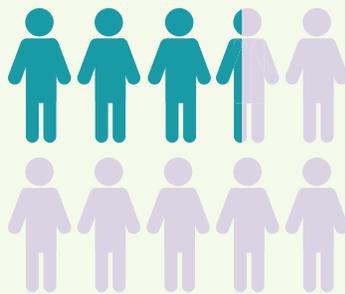
Source: The Pell Institute for the Study of Opportunity in Higher Education & Alliance for Higher Education and Democracy, University of Pennsylvania. (n.d.). *Indicators of higher education equity in the United States: 2022 historical trend report.*

TRANSFER OUTCOMES FOR COMMUNITY COLLEGE LEARNERS



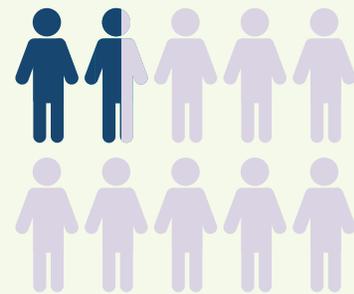
80%

OF COMMUNITY
COLLEGE LEARNERS
WANT TO TRANSFER



33%

OF COMMUNITY
COLLEGE LEARNERS
TRANSFER



<16.5%

OF COMMUNITY
COLLEGE LEARNERS
EARN A BACHELORS
DEGREE IN SIX YEARS

Because community and technical colleges are viewed as a more economically viable pathway, learners of color, first-generation college learners and lower-income learners enroll at disproportionately higher rates in two-year institutions than in four-year institutions.⁷ These learners make up a significant portion of the diverse learners who eventually attend four-year institutions, but challenges

remain in seamlessly aligning postsecondary levels to support career pathways.⁸ Approximately 80% of community college learners indicate a desire to pursue a bachelor's degree⁹, but only 33 percent of community college learners transfer. Of those who do transfer, less than half complete their bachelor's degree in six years.¹⁰ When disaggregated by race and income level, national data

demonstrates that White learners are still twice as likely to transfer as Black and Latinx learners and higher-income learners are twice as likely to transfer as lower-income learners.¹¹ Data demonstrates there is still room to improve: 31 percent of occupationally oriented community college learners do transfer to earn four-year degrees, but they are somewhat less likely to earn a credential before transferring (25 percent).¹² Vertical transfer learners (those who transfer from a two-year institution directly to four-year institution) experience a significant and nontrivial earnings penalty, in part due to a delayed entry into the labor market and credit loss at the point of transfer.¹³

Yet the value of a credential remains evident: Associate degrees and technical certificates have long been lauded for their opportunities for learners to earn credit in an applied way, while further exploring their future career options. Skills practices in work-like physical environments in community and technical colleges were associated with higher rates of program completion and training-related employment.¹⁴ The attainment of academic milestones (e.g., completing an associate degree) benefits all learners but disproportionately benefits Black and Hispanic learners as they work toward future postsecondary opportunities.¹⁵ Data from the Community College Research Center explain that success with transfer learners is not entirely dependent on institutional or student characteristics; with the right conditions and supports in place, any institution should be able to have high-quality transfer success.¹⁶ Connecting back to the employer, transfer credits are associated with higher rates of training-related employment.¹⁷ Wage data still demonstrates that a bachelor's degree provides long-term wage earning outcomes that are higher than an associate degree or a high school diploma, and employers still require four-year degrees for many advancement opportunities, including management positions or advanced technical roles.¹⁸



While the challenges to postsecondary success in career pathways are significant, policy and practice levers exist to ensure seamless alignment for learners at all on-ramps, including through transfer and re-engaging stopped-out or disengaged learners. Creating alignment between two- and four-year institutions remains key to ensuring that all learners can access the high-quality credentials needed for them to be successful in their career pathways more broadly.

Strategies for Postsecondary Alignment

Given the opportunity available to better align postsecondary institutions, multiple strategies exist at both the state and institutional levels to ensure that transfer is as seamless as possible. This brief aggregates the strategies into three major categories: flexible and transparent alignment, persistence and completion, and connection to employment.

FLEXIBLE AND TRANSPARENT CREDIT ALIGNMENT

To support career pathways across postsecondary institutions, it is critical for learners to feel confident that credit for courses they take at a community or technical college will be able to seamlessly transfer to a four-year institution. On average, however, 43 percent of learners' credits do not transfer to their receiving institution.¹⁹ A lack of articulated and transcribed credit accepted by the four-year institution, especially for applied associate degrees, often forces learners to retake coursework, resulting in increased costs or extended time to bachelor's degree completion.²⁰ To ensure that credits are not lost during the transfer process, many states have enacted policy to align credit in a flexible and transparent way, including through common course numbering systems, statewide articulation agreements and developed transfer pathways.

Common Course Numbering Systems

A common course numbering system is a regulated and uniform system that enables a crosswalk between a course (usually one that is lower level) at one institution and the same course at another institution within the state. For learners, this system provides a clear understanding of the courses that match between and across institutions and will seamlessly transfer. Nationally, 20 states have common course numbering systems.²¹ **Florida** has one of the oldest systems in the country, referred to as the Statewide Course Numbering System (SCNS), which was first approved in 1971. By 1976, all public institution courses in Florida were entered into this system, and in 1981, statute was amended to require the incorporation of postsecond-

ary and adult technical courses in the SCNS.²² Equivalent courses (those that have the same academic content and are taught by faculty with comparable credentials) are guaranteed to transfer to any other institution participating in the SCNS and can be explored through a [publicly available website](#) that lists all courses offered at each institution. **Indiana's Core Transfer Library** (CTL) similarly has a comprehensive, continually updated list of courses that are preapproved specifically for transfer among all Indiana public college and university campuses. The CTL is publicly available and searchable by university and course name.

Guaranteed Articulation and Transfer

Another strategy for ensuring credit transfer between institutions is a statewide guaranteed transfer of an associate degree, which ensures that learners who are awarded an associate degree before transferring to a four-year institution can transfer all of their credits and enter at a junior standing. Thirty-five states have a statewide legislative or regulatory policy that guarantees some level of transfer credit.²³ Many states have designated degree transfer pathways, often called 2+2 programs (two years at a two-year institution, followed by two years at an associated four-year institution) that are specially designed to support learners who intend to transfer to a four-year institution upon completion of their degree in a specific and aligned career pathway.²⁴

Every 2+2 program should be program specific, with aligned curriculum and requirements that account for technical coursework as well as academic coursework. To demonstrate this alignment, many states and institutions have made all aligned programs publicly available and explorable. For example, **Delaware** Technical Community College, a statewide two-year institution, has established more than 200 specific program-to-program transfer agreements, including for many applied degree programs. The programs, known as Connected Degrees, are [listed clearly](#) on the college's website and are sortable by degree program and by receiving institution.



While many states do not have diverse and specific transfer agreements, **Washington** has [multiple transfer degree types](#), including a Direct Transfer Agreement Associate Degree (DTA), an Associate of Science — Transfer Degree (AS-T) and a Major-Related Program (MRP). Each MRP is a course plan based on and connected to a corresponding DTA or AS-T (e.g., Biology DTA/MRP or Engineering AS-T/MRP). These different degrees are each designed to provide learners with the flexibility of completing an associate degree for specific career pathways without undue burden. For example, the DTA focuses more broadly on general education requirement completion. At all public Washington four-year institutions and most private four-year signatories, general education requirements for a baccalaureate degree are met through this path. The AS-T, on the other hand, is for learners who want to earn a bachelor's degree in engineering or science. Before learners transfer, they take lower-division major classes and some general education classes, allowing learners to meet science-related requirements for the major prior to transfer. The MRPs also advise learners to take specific prerequisites that are more directly tailored to their career pathway. Washington's four-year institutions similarly engage in local articulation agreements to ensure continuous application of applied credit. Central Washington University, for example, offers a [Bachelor of Applied Science in Information Technology and Administrative Management](#), which accepts any of the types of applied/technical degrees and directly complements the skills learned in the associate degree.

Beyond guaranteed transfer, **Massachusetts** also has guaranteed admission through its statewide [MassTransfer](#) program. While learners must apply for the MassTransfer program, those who graduate from a Massachusetts community college with at least a B average are automatically guaranteed admission to a state university or University of Massachusetts campus. Because learners do not have to apply separately to the receiving institution, complete an essay, or pay application fees, this program eases administrative burdens that might otherwise prevent transfer between institutions.

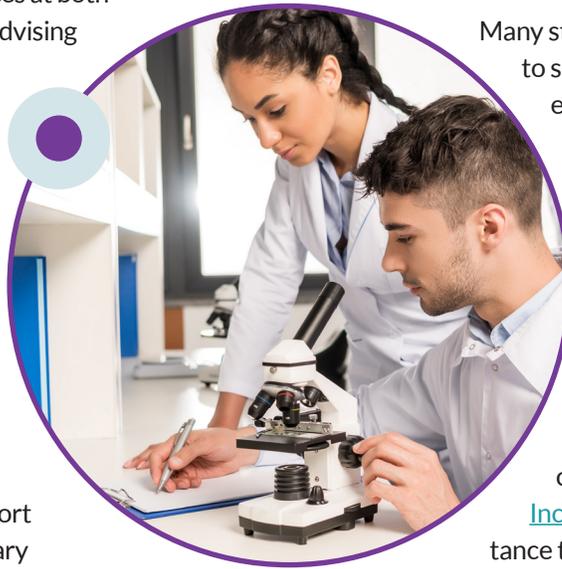
PERSISTENCE AND COMPLETION

While policy affecting the transferability and articulation of credit is vital to successful and seamless transition in career pathways, states and institutions should find opportunities to enhance the student experience during the transition. Expanding advising, financial aid and dual admission programs for learners reduces barriers to post-secondary completion as learners transfer.

In the advising space, a lack of career and academic advising can cause confusion among learners, creating duplicative coursework. On the other hand, personalized transfer advising positively contributes to a higher rate of transfer and supports transfer to more selective destinations.²⁵ **Indiana University — Indianapolis** has developed and published [2+2 degree maps](#) that are accessible by anyone at any time. This clear guidance helps learners understand what opportunities are available to them as they transfer from Ivy Tech, Indiana's statewide public community college system.

Another burden for learners is financial aid; learners may be able to afford a less expensive community or technical college program but not the tuition for the receiving four-year institution. Some states, such as **Massachusetts**, have programs specifically for transfer learners to relieve administrative burdens. The [Commonwealth Commitment](#) freezes tuition and fees for learners until degree completion and provides a 10 percent rebate for tuition and mandatory fees, among other benefits. When compared to learners who enter directly into a four-year Massachusetts institution, Commonwealth Commitment learners can save on average 36 percent on their bachelor's degree.²⁶

Finally, other programs exist between institutions for specific transfer learners to enhance their experience during the transfer process. **Indiana University – Indianapolis** and **Ivy Tech Community College** recently announced a [dual admission program](#), which admits learners concurrently into Ivy Tech and Indiana University – Indianapolis, providing increased access to services at both institutions, including cooperative advising and transition support services. This initiative builds on the two institutions' [Passport Program](#), which long supported transfer between institutions. At **The Ohio State University**, the [Dr. James L. Moore III \(JLM\) Scholars Program](#) specifically caters to underrepresented transfer learners from **Columbus State Community College**, providing learners with a cohort of peers that transfer together and can support each other's continued postsecondary success. JLM Scholars receive a peer tutor, professional development, academic coaching and financial support in years when financial scholarships are available, among other benefits.



CONNECTION TO EMPLOYMENT

While direct transfer between institutions is quite common, connections back to the workforce are vital to ensure that the four-year institution can award postsecondary credit for workforce participation at a community or technical college or elsewhere, especially if the prior experience did not result in an associate degree. Thirty states offer credit for military experiences, and other states offer articulated postsecondary credit for the completion of an industry-recognized credential.²⁷

Ohio offers articulated postsecondary credits through [Industry Transfer Assurance Guides](#), building on prior learning and work experience and allowing learners to re-engage in postsecondary degree programs. Ohio also requires related instruction for registered apprenticeships

to articulate to postsecondary credit in conjunction with an Ohio university or community college.²⁸ Other states, such as **Rhode Island**, have similarly developed policy requiring postsecondary institutions to award postsecondary credit for apprenticeship, driving the direct connection between workforce experience and degree completion.²⁹

Many states take a comprehensive approach to supporting learners who have already entered the workforce and are interested in re-engaging with four-year institutions. While most states have a “reconnect” program that provides financial aid or assistance and credit for prior learning to learners hoping to re-engage with postsecondary education, only a few have a specific workforce development focus to highlight opportunities specifically for career pathways for in-demand careers.³⁰ **Missouri's [Fast Track Workforce Incentive Grant](#)** provides financial assistance to learners with the education and skills needed to enter the workforce in fields that are in high demand, as long as they live in Missouri for three years post-grant completion. Hundreds of programs are available, including bachelor's degrees at four-year institutions.³¹ **Delaware** also recently expanded its Student Excellence Equals Degree Plus (SEED+) program to include adult learners and encourage underserved learners of all ages to participate in training and postsecondary programs for free, following certain application requirements, including that the programs must be in in-demand sectors.³²

Locally, institutions partner to provide seamless transition for learners completing apprenticeship programs, further expanding their opportunity to complete four-year degrees on top of their apprenticeship. **Denver, Colorado's** Emily Griffith Technical College, in partnership with Metropolitan State University of Denver (MSU Denver), is working to create career pathways for all learners completing a registered apprenticeship at Emily Griffith. The career pathways will connect to and articulate into MSU Denver degree pathways.³³

STATE HIGHLIGHT – COLORADO

Colorado has long been a policy-rich environment for supporting transfer initiatives between and across systems. The Colorado Department of Higher Education (CDHE) and the Colorado Community College System (CCCS), in collaboration with Governor Jared Polis and the Colorado Legislature, have created strategic priorities, multiple policies and important initiatives that support learner transfer in a flexible and aligned career pathways system.

Multiple statewide policies exist to support the transfer of Colorado residents between two- and four-year institutions and ensure that credit is captured:

Common Course Numbering

More than 1,800 courses are listed for guaranteed transfer in the statewide guaranteed transfer course catalog.

Transferrable Core of Lower-Division Courses

[31 credits of general education](#) will transfer and apply to most associate and bachelor's degrees at every public Colorado college and university.

Guaranteed Transfer of an Associate Degree

Colorado has 37 [statewide transfer agreements](#) that allow learners to enroll with junior status at a four-year institution and complete their bachelor's degree in no more than 60 additional credits. Career-specific transfer agreements in pre-engineering and nursing serve as valuable models for other career-focused degree pathways.

Reverse Transfer

Learners who transfer to a four-year institution without first completing an associate degree can combine credits to retroactively apply them toward an associate degree while still working toward a bachelor's degree. More than 2,300 learners have received associate degrees this way in the past 10 years.³⁴

Colorado is one of eight states (Colorado, Florida, Kansas, Louisiana, Missouri, Nevada, Oregon and Tennessee) that have these four policies in place.³⁵ Colorado also has policy to allow Career Technical Education coursework taken at an area technical college to transfer to apply to Associate of General Studies or Associate of Applied Science degrees.³⁶

Colorado also has other statewide initiatives to support learners' participation in four-year degrees as a component part of a career pathway. One such initiative is the **Bridge to Bachelor's Degree Program**, which guarantees admission to participating four-year institutions upon completion of an associate degree, saving learners an average of \$10,000. Participating universities include two out-of-state Historically Black Colleges and Universities: Coppin State University in Maryland and Texas Southern University. Qualified learners can also participate in the Reisher Bridge Scholars Program, which awards financial scholarships and creates "a seamless and structured pathway for high achieving transfer learners from low-income backgrounds."³⁷

Finally, Colorado has implemented a higher education [Student Bill of Rights](#), which specifically calls out a student's right to have the information they need to determine which courses are required for the completion of a degree and which courses are transferable between public two- and four-year institutions. Policies such as these enable learners to appeal transfer and articulation decisions and make informed decisions about their career pathways through higher education.

Recommendations to Expand Seamless Transition to Advance Career Pathways

States and institutions looking to further develop strategies to support learner transitions between institutions for career pathway success can review the following recommendations to better understand how to best engage partners and policymakers in this process.

Policy Recommendations

Review Existing Policy and Practice

States and institutions should actively review their state's transfer and articulation policies to best understand how these policies can be effectively leveraged to support learner success. Aggregating and mapping these policies helps determine who can be engaged and what fiscal, political or regulatory levers should be used to best activate this policy and determine gaps for further improvement.

Collect and Report Disaggregated Data to Inform Practices

Only five states (Arizona, California, North Carolina, Virginia and Washington) collect and publicly report transfer data disaggregated by race and income.³⁸ If states are not collecting data, institutions must collect and share data with each other to ensure that learners remain a priority and return on investment for transfer can be adequately demonstrated. Better metrics such as the proportion of transfer learners served, retention one year after transfer, completion of a bachelor's degree, and representation of bachelor's degree majors at graduation may support a four-year institution in making more informed decisions about the efficacy of its policies and practices.³⁹

Expand Transfer Policy to Include Credits Awarded for Applied or Technical Coursework

Too many states do not guarantee transfer of applied associate degrees or technical certificates, leading learners to complete disproportionately more coursework after transfer. States should review and align programs and curricula and consider prior learning assessments or similar inventories to ensure that all credit can be appropriately applied. Ohio is one state that has specific guidance around the transfer credit for applied associate degrees.⁴⁰



Institutional Recommendations

Engage Leadership at All Levels

From community college faculty to a state's governor, leadership must be engaged to ensure that policy makes sense and articulation agreements meet the needs of all institutions. In 2003, **Washington** established a [Joint Transfer Council](#), which works to improve statewide transfer policy and update transfer pathways and degrees. This Council is composed of 21 state, sector and institutional administrators who are committed to learner success across postsecondary institutions. A formal committee such as this with representatives from each institution also protects against turnover and allows progress to continue over time. **Colorado** similarly has statewide cross-functional faculty teams to drive programmatic and curricular alignment between two- and four-year institutions.

Clarify Messaging About Options for Learners

For learners to understand the options available to them, local institutions must be clear about what opportunities are available, what credits may transfer and how the learner will be affected. This advising should also take place at a variety of touch points, including when learners graduate from high school. Learners should be aware of student outcomes, though challenges in data collection exist; 31 states do not report any public data on transfer student outcomes and experiences, and only nine states report any program-specific graduation rate data for transfer learners.⁴¹

Incorporate Learner Voice

Understanding the specific institutional challenges learners face during the transfer process is critical for improving systems, while incorporating learner voice encourages learners to ultimately become the best advocates for their own success. **Bunker Hill Community College** and the **University of Massachusetts Boston** surveyed and interviewed cohort transfer learners to better understand their unique challenges and support learner success through the transfer process. This information then directly influenced what future changes would be made to the learner experience for transfer learners. See [With Learners, Not For Learners: A Toolkit for Elevating Learner Voice in CTE](#) for more information about how to elevate learner voice in career pathways decision-making.

Recognize the Time and Effort Needed

Partnership among postsecondary institutions takes significant time and energy to sustain, and developing comprehensive transfer initiatives takes even longer. Institutional prioritization may derail nascent efforts to further enhance postsecondary transfer initiatives. Institutions should be realistic about the time bolstering career pathways between institutions will take.



ADDITIONAL RESOURCES

[Engaging the College Community in Guided Pathways Reforms](#)

(Community College Research Center, 2023)

[The Transfer Playbook: Essential Practices for Two- and Four-Year Colleges](#)

(Aspen Institute & Community College Research Center, 2016)

[The Transfer Reset: Rethinking Equitable Policy for Today's Learners](#)

(Sova & Aspen Institute, 2021)

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The six *New Skills ready network* sites are: Boston, Massachusetts; Columbus, Ohio; Dallas, Texas; Denver, Colorado; Indianapolis, Indiana; and Nashville, Tennessee. These sites are formulating new partnerships between local school systems, higher education, employers, and government entities to develop pathways and policy recommendations that give underserved students access to higher education and real-world work experiences that lead to high-wage, in-demand jobs.

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